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(71) Applicant (for all designated States except US): **DIAGEO PLC** [GB/GB]; Edinburgh Park, 5 Lochside Way, Edinburgh EH12 9DT (GB).

(72) Inventor; and

(75) Inventor/Applicant (for US only): **ROBERTSON, John** [GB/GB]; 12 Wellesley Crescent, Blackwood, Cumbernauld, Glasgow G68 9PII (GB).

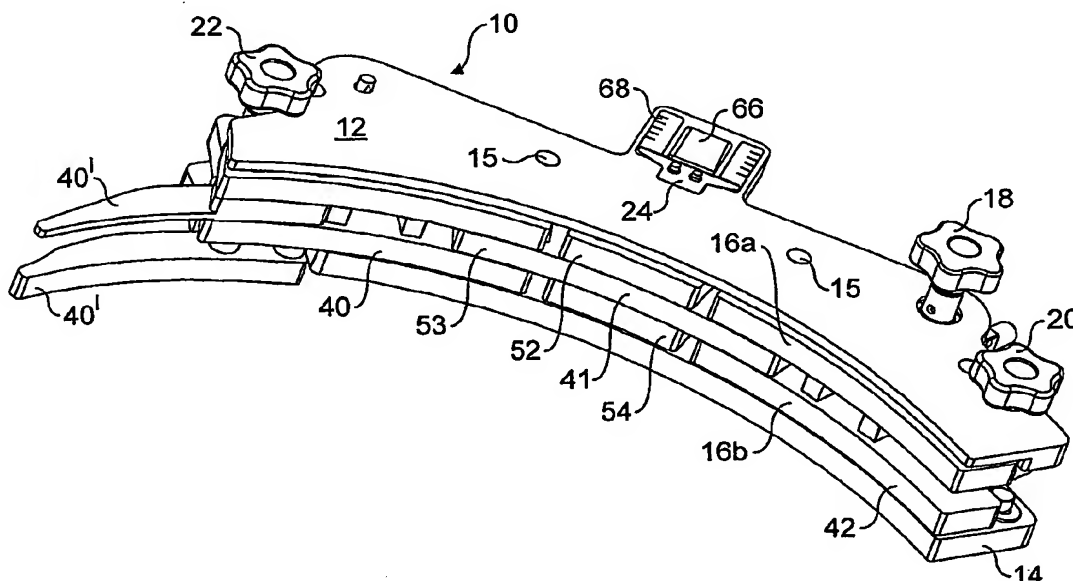
(74) Agents: **MCLEISH, Nicholas, Alistair et al.**; Boulton Wade Tennant, Verulam Gardens, 70 Gray's Inn Road, London WC1X 8BT (GB).

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[Continued on next page]

(54) Title: **AUTOMATED HANDLING LINE GUIDE RAIL ASSEMBLY**



(57) Abstract: The present invention relates to an automated handling line guide rail assembly (10) for use on an automated handling line where containers are being processed. A typical application of the present invention will be on a bottling line where containers are conveyed between various machines to be presented to and taken from the various machines by a star wheel and guide rail (16, 17) assembly. Advantageously, the present invention provides an automated handling line guide rail assembly that defines the perimeter of the container's path with a guide rail that is movable radially to define the perimeter at different radii but still centred on substantially the same spot.

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Published:

— *with international search report*

For two-letter codes and other abbreviations, refer to the "Guidance Notes on Codes and Abbreviations" appearing at the beginning of each regular issue of the PCT Gazette.

INTERNATIONAL SEARCH REPORT

International Application No.
PCT/GB2005/002447

A. CLASSIFICATION OF SUBJECT MATTER
IPC 7 B65G47/84 B65G21/20

According to International Patent Classification (IPC) or to both national classification and IPC

B. FIELDS SEARCHED

Minimum documentation searched (classification system followed by classification symbols)

IPC 7 B65G

Documentation searched other than minimum documentation to the extent that such documents are included in the fields searched

Electronic data base consulted during the international search (name of data base and, where practical, search terms used)

EPO-Internal, WPI Data, PAJ

C. DOCUMENTS CONSIDERED TO BE RELEVANT

Category *	Citation of document, with indication, where appropriate, of the relevant passages	Relevant to claim No.
X	EP 0 412 059 A (SARCOMI S.P.A) 6 February 1991 (1991-02-06) cited in the application	1-3, 5, 7, 10, 11, 26-28, 30
Y	column 2, line 31 - column 3, line 8 figures 1-3	4-6, 12, 13, 19
X	US 5 291 988 A (LEONARD ET AL) 8 March 1994 (1994-03-08)	1, 2, 16, 22, 30
Y	column 2, line 12 - line 64 figures 1-6	13, 17-19, 22-24
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☒ Further documents are listed in the continuation of box C.

☒ Patent family members are listed in annex.

* Special categories of cited documents:

- 'A' document defining the general state of the art which is not considered to be of particular relevance
- 'E' earlier document but published on or after the international filing date
- 'L' document which may throw doubts on priority claim(s) or which is cited to establish the publication date of another citation or other special reason (as specified)
- 'O' document referring to an oral disclosure, use, exhibition or other means
- 'P' document published prior to the international filing date but later than the priority date claimed

- 'T' later document published after the international filing date or priority date and not in conflict with the application but cited to understand the principle or theory underlying the invention
- 'X' document of particular relevance; the claimed invention cannot be considered novel or cannot be considered to involve an inventive step when the document is taken alone
- 'Y' document of particular relevance; the claimed invention cannot be considered to involve an inventive step when the document is combined with one or more other such documents, such combination being obvious to a person skilled in the art.
- '&' document member of the same patent family

Date of the actual completion of the international search

16 September 2005

Date of mailing of the international search report

05/10/2005

Name and mailing address of the ISA

European Patent Office, P.B. 5818 Patentlaan 2
NL - 2280 HV Rijswijk
Tel. (+31-70) 340-2040, Tx. 31 651 epo nl,
Fax: (+31-70) 340-3016

Authorized officer

Papathoeofrastou, M

INTERNATIONAL SEARCH REPORT

International Application No
PCT/GB2005/002447

C.(Continuation) DOCUMENTS CONSIDERED TO BE RELEVANT		
Category *	Citation of document, with indication, where appropriate, of the relevant passages	Relevant to claim No.
X	CH 431 377 A (EMHART ZURICH S. A.)	1, 30
Y	28 February 1967 (1967-02-28) column 3, line 11 - line 24 figure 1	4-6, 17, 18, 22-24
X	US 6 378 695 B1 (RINNE RHETT L)	1, 30
Y	30 April 2002 (2002-04-30) the whole document	12

INTERNATIONAL SEARCH REPORT

International application No.
PCT/GB2005/002447

Box II Observations where certain claims were found unsearchable (Continuation of item 2 of first sheet)

This International Search Report has not been established in respect of certain claims under Article 17(2)(a) for the following reasons:

1. ☐ Claims Nos.:
because they relate to subject matter not required to be searched by this Authority, namely:
2. ☒ Claims Nos.: 31, 32
because they relate to parts of the International Application that do not comply with the prescribed requirements to such an extent that no meaningful International Search can be carried out, specifically:
see FURTHER INFORMATION sheet PCT/ISA/210
3. ☐ Claims Nos.:
because they are dependent claims and are not drafted in accordance with the second and third sentences of Rule 6.4(a).

Box III Observations where unity of invention is lacking (Continuation of item 3 of first sheet)

This International Searching Authority found multiple inventions in this International application, as follows:

1. ☐ As all required additional search fees were timely paid by the applicant, this International Search Report covers all searchable claims.
2. ☐ As all searchable claims could be searched without effort justifying an additional fee, this Authority did not invite payment of any additional fee.
3. ☐ As only some of the required additional search fees were timely paid by the applicant, this International Search Report covers only those claims for which fees were paid, specifically claims Nos.:
4. ☐ No required additional search fees were timely paid by the applicant. Consequently, this International Search Report is restricted to the invention first mentioned in the claims; it is covered by claims Nos.:

Remark on Protest

- ☐ The additional search fees were accompanied by the applicant's protest.
- ☐ No protest accompanied the payment of additional search fees.

FURTHER INFORMATION CONTINUED FROM PCT/ISA/ 210

Continuation of Box II.2

Claims Nos.: 31,32

The claims 31,32 are rely on reference to the drawings contrary to Rule 6.2 (a) PCT.

The applicant's attention is drawn to the fact that claims relating to inventions in respect of which no international search report has been established need not be the subject of an international preliminary examination (Rule 66.1(e) PCT). The applicant is advised that the EPO policy when acting as an International Preliminary Examining Authority is normally not to carry out a preliminary examination on matter which has not been searched. This is the case irrespective of whether or not the claims are amended following receipt of the search report or during any Chapter II procedure. If the application proceeds into the regional phase before the EPO, the applicant is reminded that a search may be carried out during examination before the EPO (see EPO Guideline C-VI, 8.5), should the problems which led to the Article 17(2) declaration be overcome.

INTERNATIONAL SEARCH REPORT

Information on patent family members

International Application No

PCT/GB2005/002447

Patent document cited in search report		Publication date	Patent family member(s)	Publication date
EP 0412059	A	06-02-1991	BR 9003765 A	03-09-1991
			DE 69006797 D1	31-03-1994
			IT 1234736 B	26-05-1992
			US 5082105 A	21-01-1992
US 5291988	A	08-03-1994	NONE	
CH 431377	A	28-02-1967	DE 1940484 U	08-06-1966
US 6378695	B1	30-04-2002	NONE	



INVESTOR IN PEOPLE

Application No: GB0414211.3

Examiner: Dave Woolf

Claims searched: 1-32

Date of search: 14 October 2004

Patents Act 1977: Search Report under Section 17

Documents considered to be relevant:

Category	Relevant to claims	Identity of document and passage or figure of particular relevance
X,E	1 at least	WO 2004/074142 A1 (SIDEL) Page 3 lines 3-11
X	1 at least	WO 1994/12412 A1 (STAR CONVEYORS) Page 2 lines 23-36.

Categories:

X	Document indicating lack of novelty or inventive step	A	Document indicating technological background and/or state of the art.
Y	Document indicating lack of inventive step if combined with one or more other documents of same category.	P	Document published on or after the declared priority date but before the filing date of this invention.
&	Member of the same patent family	E	Patent document published on or after, but with priority date earlier than, the filing date of this application.

Field of Search:

Search of GB, EP, WO & US patent documents classified in the following areas of the UKC^W :

B8A

Worldwide search of patent documents classified in the following areas of the IPC⁰⁷

B65G

The following online and other databases have been used in the preparation of this search report

Epodoc, WPI, PAJ